DOCUMENT RESUME

ED 035 379 24 HE 001 337

AUTHOR Stegman, Wilbur N.
TITLE A Study to Develop Living Area Activities Designed to Improve the Retention Ratio of Potential Student Dropouts. Final Report.
INSTITUTION Southwest Missouri State Coll., Springfield.
SPONS AGENCY Office of Education (DHEW), Washington, D.C. Bureau of Research.
BUREAU NO BR-8-F-112
PUB DATE 15 Dec 69
GRANT OEG-6-9-008112-0034(057)
NOTE 49p.

EDRS PRICE EDRS Price MF-$0.25 HC-$2.55
DESCRIPTORS Cocurricular Activities, Counseling Services, *Dropout Prevention, Grade Point Average, *Higher Education, *Programs, *Student College Relationship, *Student Personnel Services, Tutoring
IDENTIFIERS *Southwest Missouri State College

ABSTRACT

The purpose of this study was to determine the effectiveness of various activities designed to retain dropout-prone college students at Southwest Missouri State College through the use of experimental grouping and the development of counseling and guidance activities for these students. One hundred forty potential dropouts were selected from the 1968 entering freshman class and half were placed in sample groups and half in control groups. Assigned to special residence halls, the sample groups were provided with graduate research assistants responsible for conducting certain activities and providing special services designed to prevent college withdrawal. The activities and services included academic advisement and tutoring, personal guidance and counseling, and social and economic assistance when necessary. Activities were conducted on an individual and group basis. After one year, the results indicated a significantly higher (beyond 95% confidence) rate of retention for the sample students as compared to their control counterparts. Grade point averages for the sample students were also substantially higher, although not statistically significant. It is recommended that the program be combined with the counselor preparation program and enlarged to include all freshmen. (DS)

ED035379

FINAL REPORT
Project No. 8-F-112
Grant No. OEG-6-9-008112-0034 (057)

A STUDY TO DEVELOP LIVING AREA ACTIVITIES DESIGNED TO IMPROVE THE RETENTION RATIO OF POTENTIAL STUDENT DROPOUTS

Wilbur N. Stegman
Southwest Missouri State College
Springfield, Missouri 65802

December 15, 1969

The research reported herein was performed pursuant to a grant with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

HE001 337

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

Preface

Grateful acknowledgement is extended to the four Research Assistants who were a necessary and important part of this study, Gary Shafer, H. Jefferson Tallent, Elaine Moring, and Martha Swafford. This team administered to the needs of their groups far above and beyond the point of pecuniary compensation with each one giving something of himself to the project.

It is from their final reports that the conclusions and recommendations must be drawn for they were there. These four have proven that it is possible without professional guidance training to make a positive contribution to the needs of college freshmen.

W. N. S.

CONTENTS

Section	Page
Summary	iii
Introduction	1
Purpose	1
Review of Literature	1
Objectives	3
Hypotheses	3
Scope and Limitations	5
Procedures	5
Program Arrangements	6
The Philosophy Supporting the Program	7
The Handbook	8
The Selection of Experimental and Control Groups	8
The Groups	9
Activities (Theoretical)	13
Activities (Specific)	17
Statistical Procedures	21
Findings	23
Discussion and Recommendations	29
Bibliography	33
Appendix A	35
Appendix B	37

Summary

This study was designed to develop experimental living area activities which would improve the retention ratio of college freshmen.

The objectives included the identification of potential dropout students and assigning them to an empathetic graduate assistant living in the residence hall and charged with the responsibility of aiding the potential dropout group to stay in college successfully and in a self-satisfactory manner.

One hundred forty (140) potential dropouts were selected, prior to the beginning of fall classes, from the resident freshmen in four residence halls. They were selected from among those with the lowest success potentialities as determined by high school rank, entrance exam (SCAT) scores, and their likes and dislikes for necessary college activities. The selected group was divided into four matching research and control groups, one in each residence hall. A graduate research assistant was placed in each residence hall and charged with conducting selected activities and with providing selected services designed to keep the experimental groups successfully in college to the enrollment for their sophomore year.

The study was limited to selected groups of freshmen living in campus housing and in numbers sufficiently small (20 maximum) to be adequately served by one graduate assistant. The null hypotheses tested were:

1. The mean grade point average of the experimental group will not differ significantly (95 per cent level of confidence) from the mean grade point average of a control group.

2. There will be no significant difference (95 per cent level of confidence) in the percentage of students who return to the College for a second term between the experimental and control groups.

There was an attempt to generalize from the samples to the entire population of each house to show that if activities used in the study were extended to all resident freshmen that the holding power of the College might be significantly enhanced.

Activities and services provided the experimental groups included academic advisement and tutoring, personal guidance and counseling, and social and economic aid and advisement where necessary. Activities were conducted on an individual and/or group basis as necessary and practical.

The results of this study indicated that the personal attention and help given to the experimental study groups may have been instrumental in accounting for a significant (beyond 95 per cent confidence) raise in persistency for the experimental students as compared to their control counterparts. (21.9 per cent difference for males and 15 per cent difference for females). It was theorized that if the same percentages could be extended to an entire freshman class that as many as 248 males and 167 females might be saved from freshman attrition each year.

It was noted that this study ignored the large number of freshman students who live off campus, in housing or with parents, and who commute to the College. A companion study had indicated that this group may have a higher potential for attrition than the campus-housed group. This area needs to be studied.

The study recommends an enlargement of the program to include all freshmen with a yearly follow-up as long as they remain in the College. It is further recommended that the program be combined with the counselor preparation program so that the graduate assistants may receive work experience on a supervised practicum basis.

A STUDY TO DEVELOP LIVING AREA ACTIVITIES DESIGNED TO IMPROVE THE RETENTION RATIO OF POTENTIAL STUDENT DROPOUTS

INTRODUCTION

Purpose

The purpose of this study was to determine the effectiveness of various activities designed to retain dropout prone college students in residence halls of Southwest Missouri State College through the use of experimental grouping and the development of counseling and guidance activities for these students.

A Review of Literature

We can no longer afford to dismiss the college dropout as being one who merely lacks interest and intelligence. Rather we must recognize his problem as one of far greater complexity. The problem which faced past generations is increasingly important to our generation and, unless effective remedial steps are taken, will become increasingly pertinent to the future welfare of our educational institutions.

Research on college student dropouts and college student attrition rates probably has a history of at least 40 years (15). A summary of these studies indicates both a variation among colleges as well as the likelihood of change from year to year within one institution. Such conditions point up the need to maintain records on every student as detailed and as up to date as possible, and to utilize these records for current evaluation and research to be conducted on a long-term longitudinal basis.

Two areas of research which are conspicuous by their absence are those concerning student satisfactions with their educational experiences--this in spite of the fact that recent studies show the largest cause of high school dropouts to be dissatisfaction with school (4)--and the study of faculty attitudes, values, and interests in relation to the successful and unsuccessful student.

The magnitude of the attrition rate among students at all levels in all institutions generally ranges from 50 per cent (15) upward. In a review of research on college dropouts, Marsh (9) reported in 1958, that he had found a dropout rate of 60.5 per cent as a national average for the previous four-year period. His report further showed this rate

to range up to 71.2 per cent for freshmen in teachers colleges.

Although a number of factors have been correlated with the dropout, current research at this college is being geared to the problem of predicting the potential dropout at the time of his freshman enrollment. Prevention of dropouts, through the elimination of controllable causes, is also a vital and legitimate goal.

At the end of a ten-year study Jex and Merrill (7) predicted that by 1975, due to the application of improved retention knowledge, the dropout is likely to be found primarily among academically incompetent students, and that at least 60 per cent of the initial dropout group will ultimately graduate from college.

An adequate solution to the problem of low student retention at Southwest Missouri State College will be found only as a result of cooperative, long-term research through the development of valid and efficient research techniques.

In a broad sense, the causes for college dropout have been found to fall into two major categories. The first category includes personal factors such as ability, achievement level, finances, goals, and personality need factors. The second category includes institutional factors which are generally classified as educational or institutional press (12).

Murray (10) provided the concepts for personality need and environmental press. He described personality needs as those objectives which a person characteristically tries to satisfy for himself in response to the organizational tendencies of his unique personality which give it unity and direction. He explained press in terms of the unique view which the individual has of the world around him. Press defines what he must cope with and outlines the direction his behavior must take in order for him to find need satisfaction, reward and success within his environment.

A first step in solving the retention problem may well be to adopt the philosophy that the primary purpose of the college is to meet the needs of its students. Pace (13) has indicated that the educationally and psychologically functional environment of a college must be congruent to student needs and (12) that students tend to select colleges where they expect the environmental press to be somewhat congruent to their own personality needs.

Standing and Parker (14) point out that preconceptions of the college by entering freshmen and their subsequent poor adaptation to the environmental characteristics of their institution may lead to high

freshman attrition rates. There was evidence to support the position that the perception of the institution changed after one semester significantly more in dropouts than in the persisters. There appeared to be little difference in the preconceptions of the two groups.

A number of studies (1, 2, 3, 4, 6, 8, 11, 16) show that there are several personality needs which correlate with the school dropout. These are essentially personality needs which were described by Murray (10) and which have been measured with such instruments as the Activities Index and the Edwards Personal Preference Schedule. A listing of these factors is shown in Table I.

It was anticipated that a student who finds himself in an educational setting where his basic needs are not being met will not only be unhappy in that setting but might be unsuccessful. It was further anticipated that a particular educational setting will require certain activities on the part of successful students and that a student who dislikes many of these activities may well be unsuccessful while the persistent student will probably like a greater portion of the required activities.

Objectives

Since this study was concerned with the activities of college students, the rationale was geared to activity. The objectives were as follows:

1. To identify the potential dropout together with those activities necessary to success and satisfaction in college to which he relates negatively.

2. To provide the potential dropout with an empathetic graduate assistant who will help him to identify those activities and to learn to relate to them in a meaningful and satisfactory manner.

3. To provide the potential dropout with a variety of group and personal counseling and guidance activities designed to help him to remain a persistent college student.

Hypotheses

This project was concerned with finding and describing activities which would keep potential freshman dropouts from higher education in college.

It was anticipated that the application of the selected activities

TABLE I

PERSONALITY NEEDS AND CORRELATION WITH DROPOUTS

TYPE OF NEED	CORRELATION WITH DROPOUTS
Achievement	Negative
Conformity	Negative
Order	Negative
Endurance	Negative
Dominance	Negative (females) Positive (males)
Nurturance (females)	Positive
Change	Positive
Nonconformity	Positive
Irresponsibility	Positive
Aggression	Positive
Heterosexuality	Positive

These factors are among those measured by both the Activities Index and the Edwards Personal Preference Schedule.

to a group of students would result in a raise in grade point average and in a raise in the persistency rate as compared with a similar group of students without these activities.

Stated formally, the null hypotheses being tested were:

(1) The mean grade point average of the experimental group will not differ significantly (95 per cent level of confidence) from the mean grade point average of the control group.

(2) There will be no significant difference (95 per cent level of confidence) in the percentage of students who do not return to Southwest Missouri State College for the 1969 fall term between the experimental and control groups.

Scope and Limitations

This study was an attempt to show that a selected group of students, when given the benefit of certain selected helps and activities, would achieve significantly better and would persist in college at a rate significantly higher than a similar group of students without those aids and activities.

The study was limited to selected groups of freshmen living in campus housing and in numbers sufficiently small to be adequately served by four research assistants.

There was an attempt to generalize from the samples to the entire college housing population to show that if the activities used in this study were extended to all resident college freshmen that the holding power of the college may be significantly enhanced.

Procedures

1. Identify potential dropouts from the 1968 freshman class using available data from admissions, testing, and a related research project to make the best predictions possible. Prepare a data sheet for each subject containing the information about him which seems to be contributing to his dropout potential.

2. Divide the experimental group equally among the four residence halls and as equally as possible on all wings and floors and designate one-half of the wings and floors as experimental groups with the other one-half as control groups.

3. Assign resident counseling assistants to the experimental groups in a ratio of approximately one counselor to each 150 students.

4. Provide the experimental groups, through the graduate assistants, with counseling, guidance, social, recreational, and study activities designed to meet their needs and to keep them in college.

PROGRAM ARRANGEMENTS

The purpose of this program was to place research assistants in living areas, to furnish them with the identity of potential dropouts or academically weak students, to furnish them with pertinent data about those students, and to supervise them in the development of educational activities designed to keep those students successfully in college.

Criteria of Activities

The activities were developed with the following criteria in mind:

1. Individual Aptitude

   Activities were geared to the individual needs and aptitudes so that each person might have the optimum amount of educational experience for a given expenditure of time and effort which he did not find prohibitive.

2. Quality of Activities

   Each activity was designed and executed under a standard of quality such that it might, through its presentation and exploration, give the optimum of success for each student in the program.

3. The Development of Ability to Understand and Accept

   Every attempt was made to enhance the ability of the student to understand the nature of the educational experience he is being offered and the procedures he must follow to accept and personalize that experience.

The Philosophy Supporting the Program

We hoped that most students (perhaps 75 to 90 per cent) could find a happy and successful college experience and we believed that it was the task of the college to find the means, the methods, and the materials which will enable the largest portion of registering students to attain and complete such an experience.

The problem was not to find the few who could succeed but, rather, to determine how the largest possible proportion of a selected age group could choose and learn effectively those skills and subject matter essential to their maximum development in a complex society. We believed that the educational experience must be both successful and rewarding in order that learning may continue throughout one's lifetime as needed.

The Research Assistants

The procurement of the graduate students to carry out this program was difficult from the outset due to the limited amount of time available. Very little could be done until it was learned that the grant had been given final approval.

An announcement was sent to fifteen colleges and universities in the immediate area and to faculty members of Southwest Missouri State College. (See the announcement in Appendix A). It should be noted that no applications were received from other colleges, probably due to the late date.

Five applications were received from graduate students at Southwest Missouri State College from which three persons were eventually hired. The other two did not possess the necessary qualifications. None was available for Blair House, a new high-rise dorm for women who share joint eating and recreational facilities with the men in Shannon House. The students in Blair may be considered as a more select group scholastically and a more sophisticated group socially than the women in Wells House, the other dormitory for women.

During the first (1968, fall) semester, considerable interest had been generated among Blair females by the presence of Research Assistants in the other three dorms. A number had sought "help" from the male Research Assistant assigned to Shannon House, the male side of the high-rise duplex.

In late December, 1968, a fourth Research Assistant was hired to begin at the beginning of the spring semester.

The Handbook

One of the first tasks with the new assistants was to orient them to the problems and procedures of the new project. This was done through use of the Handbook for Research Assistants (see Appendix B) which was prepared as soon as notice was received of grant approval. This handbook has served as an outline of the project and the activities developed from it. Much of this report is taken from the Handbook. The following information is pertinent to the understanding of the program.

The Research Assistants were known as Resident Research Assistants. The activities were carried out in the privacy of their own quarters, in the quarters of the counselee, in a common meeting room, or elsewhere, as desired and/or assigned.

They assisted the Project Director in selected phases of data collection, preparing, and reporting.

The Selection of Experimental and Control Groups

Every attempt was made to control variables which might have a relation to the groups.

It had been assumed that since considerable research had shown that both aptitude and past academic achievement have a bearing on student attrition that both should be considered in selecting the project groups. It was eventually discovered, however, that the percentile rank in graduating high school classes was not available for all subjects so it was abandoned. The School and College Aptitude Test (SCAT), published by the Coop Testing Division of Educational Testing Service, Princeton University, was used as the primary measurement of ability for all freshmen in four-year colleges in Missouri. The state norms for the fall term, 1967, showed a mean raw score for all Missouri freshmen of 67 with a Standard Deviation of 7. This test was used to determine ability of all subjects.

Descriptive Responses of Persistent Students (DROPS)

The Project Director had previously developed an instrument for measuring student likes and dislikes of college activities pertinent to success or failure in college entitled Descriptive Responses of Persistent Students. This instrument was used to select some students on the basis of those at least 2 Standard Deviations from the mean. On the basis of these two sets of scores, SCAT and DROPS, experimental

and control groups were selected who were not significantly different at the 95 per cent level of confidence.

The control groups were identified as students living within the residence halls. The control groups matched with the experimental groups on the basis of ability as measured by the SCAT and on the basis of likes and dislikes of college activities as measured by the Descriptive Responses of Persistent Students.

The Groups

Group 1E was composed of twenty (20) females living in Wells House among a total of 630 other females, mostly freshmen. Group 1C was composed of twenty (20) females living in the same house. Each of the forty (40) females was originally identified as a potential dropout on the basis that she was below the 50th percentile in her high school rank and below the 25th percentile on the SCAT, and/or that she was more than 1.5 Standard Deviations above mean on the Descriptive Responses of Persistent Students. The mean score for the normative sample used on DROPS had been found to be 21.78 with a Standard Deviation of 3.46. The higher the score, the more descriptive of a potential dropout. Each female, chosen on this basis, had a DROPS score of 27 or above. Table II shows Groups 1E and 1C with their scores on SCAT and DROPS.

Group 2E was composed of eighteen (18) males living in Freudenberger House among a total of 640 other male students, most of whom were freshmen. Group 2C was composed of eighteen (18) males living in the same house. Each of the thirty-six (36) males was originally identified as a potential dropout on the basis that he was below the mean on the SCAT and/or at least 1 Standard Deviation above the mean on the DROPS. Each of the males chosen by the method had a raw score of 25 or above on the DROPS. Table III shows Group 2E and 2C with their scores on SCAT and DROPS.

Group 3E was composed of twelve (12) males living in Shannon House among 350 other males, most of whom were freshmen. This group was chosen solely on the basis of their DROPS scores as there were not enough students available who were below the mean on the SCAT. Each one had a DROPS score of 25 or more.

The reason for this is that Shannon House is a new high-rise dorm for men and houses a select group compared to Freudenberger House.

Group 3C was composed of twelve (12) males living in Shannon House to be used as a control group. They were comparable to 3E in abilities and aptitudes. (See Table IV).

TABLE II

WELLS FEMALES

SCAT AND DROPS SCORES WITH MEANS, MEAN DIFFERENCES, STANDARD ERROR OF DIFFERENCE (S. E. D.) AND CRITICAL RATIO (C. R.)

SCAT				DROPS			
Controls (1C)		Experimentals (1E)		Controls (1C)		Experimentals (1E)	
No.	Raw Score	No.	Raw Score	No.	Raw Score	No.	Raw Score
1C	74	1E	61	1C	29	1E	29
2C	75	2E	31	2C	30	2E	30
3C	64	3E	45	3C	29	3E	29
4C	67	4E	66	4C	29	4E	29
5C	64	5E	52	5C	29	5E	29
6C	73	6E	67	6C	29	6E	28
7C	61	7E	56	7C	28	7E	28
8C	56	8E	48	8C	28	8E	28
9C	80	9E	53	9C	28	9E	28
10C	64	10E	80	10C	28	10E	28
11C	49	11E	43	11C	23	11E	28
12C	50	12E	51	12C	19	12E	31
13C	55	13E	56	13C	20	13E	23
14C	39	14E	67	14C	32	14E	32
15C	85	15E	68	15C	31	15E	31
16C	71	16E	67	16C	30	16E	30
17C	62	17E	64	17C	30	17E	30
18C	57	18E	85	18C	30	18E	30
19C	45	19E	76	19C	29	19E	29
20C	64	20E	85	20C	30	20E	29
Mean =	62.75	Mean =	61.05	Mean =	28.05	Mean =	28.95

Mean Dif. = 1.70

S. E. D. = 0.85

C. R. = 2.00

Mean Dif. = 0.90

S. E. D. = 0.85

C. R. = 1.06

Note: Where the C. R. is less than 2.09 the null hypothesis of no difference must be accepted at the 95 per cent level of confidence.

TABLE III

FREUDENBERGER MALES

SCAT AND DROPS SCORES WITH MEANS, MEAN DIFFERENCES, STANDARD ERROR OF DIFFERENCE (S. E. D.) AND CRITICAL RATIO (C. R.)

SCAT				DROPS			
Controls (2C)		Experimentals (2E)		Controls (2C)		Experimentals (2E)	
No.	Raw Score	No.	Raw Score	No.	Raw Score	No.	Raw Score
1C	53	1E	43	1C	23	1E	27
2C	41	2E	67	2C	21	2E	25
3C	77	3E	66	3C	26	3E	
4C	54	4E	47	4C	27	4E	18
5C	51	5E	28	5C	22	5E	23
6C	72	6E	74	6C	27	6E	27
7C	48	7E	53	7C		7E	18
8C	41	8E	41	8C		8E	22
9C	78	9E	34	9C	26	9E	22
10C	75	10E	70	10C	28	10E	27
11C	53	11E	92	11C		11E	30
12C	65	12E	38	12C	25	12E	25
13C	56	13E		13C	10	13E	29
14C	54	14E	72	14C	26	14E	26
15C	32	15E	84	15C	23	15E	27
16C	75	16E	56	16C	26	16E	
17C	56	17E	41	17C	21	17E	26
18C	55	18E	52	18C	19	18E	25
Mean =	56.35	Mean =	57.56	Mean =	24.81	Mean =	23.33

Mean Dif. = 1.21

S.E.D. = 0.83

C.R. = 1.45

Mean Dif. = 1.48

S.E.D. = 1.05

C.R. = 1.40

Note: Where the C.R. is less than 2.10 the null hypothesis of no difference must be accepted at the 95 percent level of confidence.

TABLE IV

SHANNON MALES

SCAT AND DROPS SCORES WITH MEAN, MEAN DIFFERENCES, STANDARD ERROR OF DIFFERENCE (S. E. D.) AND CRITICAL RATIO (C. R.)

SCAT				DROPS			
Controls (3C)		Experimentals (3E)		Controls (3C)		Experimentals (3E)	
No.	Raw Score	No.	Raw Score	No.	Raw Score	No.	Raw Score
1C	79	1E	88	1C	27	1E	27
2C	58	2E	69	2C	27	2E	27
3C	86	3E	92	3C	26	3E	26
4C	62	4E	73	4C	26	4E	26
5C	66	5E	73	5C	26	5E	26
6C	94	6E	62	6C	26	6E	26
7C	76	7E	89	7C	25	7E	25
8C	67	8E	63	8C	25	8E	25
9C	63	9E	53	9C	25	9E	25
10C	64	10E	82	10C	25	10E	25
11C	72	11E	52	11C	25	11E	25
12C	59	12E	55	12C	25	12E	25
Mean =	70.50	Mean =	70.92	Mean =	25.67	Mean =	25.67

Mean Dif. = 0.42

S.E.D. = 0.86

C.R. = 0.48

Mean Dif. = 0.00

S.E.D. = 0.31

C.R. = 0.00

Note: Where the C.R. is less than 2.20 the null hypothesis of no difference must be accepted at the 95 per cent level of confidence.

The control groups were given help on the same basis as all other resident hall students but only when they asked for it. They were otherwise unknown from the regular students.

The research groups, on the other hand, were extended every help and encouragement to remain in school and to have a happy and successful college experience. When the fourth Resident Assistant was hired to serve for the spring semester of 1969, immediately a fourth group (4E and 4C) of experimental and control students were selected for Blair House. The groups were chosen by a method which was actually a combination of methods used in the other three houses.

All the girls in Blair House were ranked according to their scores on three different measurements: SCAT, DROPS and H.S. Percentile Rank according to anticipated success in college.

The raw scores on each criterion were converted to a standard score having a Standard Deviation of 15 and a mean score of 50.* Each girl was then given the average or mean of her three Standard Scores which is called a total Standard Score.

Forty girls with the lowest total Standard Scores were then chosen and divided into two equal groups of twenty each and used as experimentals (4E) and controls (4C).

The experimental group, 4E, was subjected to the same activities as were being used with the other three experimental groups.

Group 4C was chosen as a control for experimental Group 4E. This control group is comparable to the experimental group in Total Standard Scores and in Grade Point Averages (G.P.A.) showing no significant differences at the 95 per cent level of confidence. (Tables V and VI show the scores for both groups).

Activities (Theoretical)

The following list of activities, both theoretical and specific

---

*The DROPS questionnaire is designed so that potential dropout students will answer the larger number of questions in the expected manner, therefore, the higher the score the more potential as a dropout. In order to make the low DROP score indicative of dropout potential a weighted score was given which equaled the total score possible minus the raw score obtained. The weighted scores were then converted to standard scores.

TABLE V

BLAIR HOUSE EXPERIMENTAL GROUP 4E FEMALES

Number	Fall Semester G.P.A.*	Total Standard Score**
1.	2.20	54
2.	2.47	47
3.	2.67	54
4.	3.00	60
5.	2.33	45
6.	2.33	57
7.	2.33	56
8.	2.27	50
9.	2.40	57
10.	1.50	50
11.	2.80	52
12.	3.00	52
13.	1.08	37
14.	2.81	56
15.	1.60	47
16.	3.06	62
17.	2.21	42
18.	1.40	44
19.	2.87	59
20.	1.29	44

* The Mean G.P.A. of the group is 2.29

** The mean total standard score of the group is 51

Each total standard score represents a weighted average of the standard scores from SCAT, DROPS, and High School Percentile Rank.

TABLE VI

BLAIR HOUSE CONTROL GROUP 4C FEMALES

Number	Fall Semester G.P.A.*	Total Standard Score**
1.	1.88	48
2.	2.20	61
3.	2.25	58
4.	1.35	43
5.	1.77	54
6.	3.73	59
7.	2.81	52
8.	1.67	51
9.	3.20	54
10.	2.25	34
11.	2.06	52
12.	2.27	55
13.	3.07	53
14.	3.75	48
15.	3.62	65
16.	1.33	40
17.	1.73	46
18.	1.79	44
19.	1.43	47
20.	2.44	56

* The mean G.P.A. of the group is 2.31

** The mean total standard score of the group is 51

Each total standard score represents a weighted average of standard scores from SCAT, DROPS and High School Percentile Rank.

had been prepared as a guideline for the use of the research assistants as they looked for ways to help potential college dropouts find a successful and rewarding college experience. The list was not limited to those listed but could be increased as the program developed.

1. Tutorial Help

   Every attempt was being made to make this type of help available to students having particular academic difficulties which couldn't be helped in other ways.

2. Small Group Sessions

   The assistants met regularly with small groups (two-four) of students to help them to understand and help themselves and to help one another.

   The more able students were encouraged to strengthen their own concepts and understandings through the process of helping the others to grasp an educative experience through alternative ways of explaining and using that experience.

3. Develop Perseverance for College

   Perseverance is the time and effort the student is willing to spend in the college experience. Students appear to approach the college experience with varying amounts of perseverance. The student needs to be assured and reassured until he accepts the idea that if his college experience is not successful and rewarding in one way, alternatives are available.

   All students must sooner or later give up a task if it is too painful for them. Frequency of reward (praise and recognition) and evidence of success in learning can increase a student's perseverance in the college situation. The Research Assistants provided this type of supportive feedback to the experimental groups.

4. Adjustment to College

   Each experimental student was encouraged to extend the time allowed for a satisfactory college experience. (A month or an academic year may be enough for some students to adjust to the college and not enough for others.

Students who drop out haven't taken enough time). Each was encouraged and helped to extend his time so that he might develop a rewarding college experience.

5. Evaluation Sessions

A primary emphasis on competition may destroy the learning and adjustment in any situation. We believe that cooperation and teamwork are essential to individual student success. Reinforcement of proper actions, attitudes and decisions, together with evaluative feedback, were provided each student so that he might view himself in a positive way.

The Research Assistant helped each student to find the positive view by providing suggestions for improvement and an evaluation of success.

Activities - (Specific)

1. Administrative

Each Research Assistant was expected to contribute to the administration of the project as follows:

A. Prepare and maintain an individual folder on each counselee which should contain the following information:

(1) Personal data
(2) Family data
(3) Test scores - DROPS, A.I. & C.C.I. Answer Sheets
(4) High school grades
(5) Name of adviser
(6) Record of financial assistance
(7) A schedule of classes
(8) Mid-term grades
(9) Attendance report
(10) Disciplinary reports
(11) Notes of individual interviews and all related activities
(12) R.A. reports
(13) Evaluation
(14) Other information as deemed necessary

B. Prepare a list of counselees on each hall for the Resident Assistant on that hall.

C. Furnish information for the preparation of a consolidated list of counselees in eight copies

for distribution to:

a. Housing
b. Head resident
c. Dean of Students
d. Dean of Men
e. Dean of Women
f. Assistant Dean of Faculties
g. Counseling Center
h. Other, as necessary

2. Individual Conferences (one or more per counselee)

The Research Assistants were encouraged to concentrate on this type of activity during the first month and after the 10th week (follow-up) of each semester.

The individual conference should have contained, but was not necessarily limited to, the following:

A. The establishment of rapport and a satisfactory working relationship between counselor and counselee.

B. An identification of counselee interests.

C. A review of the academic potential of the student.

D. Discussion of classes scheduled with the counselee's reaction to those he is attending.

E. Work out a scheduling of counselee's time to include: class, study, co-curricular, recreational, free, other.

F. Attempt to verify and crystallize attitude, shown on DROPS, A.I. and C.C.I. questionnaires.

G. Evaluate counselee for group activities.

H. Schedule for tutorial help as deemed necessary - find tutor.

I. Complete interview check list.

J. Other as deemed necessary.

3. Group Activities

The assistants concentrated on group activities during the second and third month of each semester. Participants were being selected and invited during the individual conferences. Group activities included, but were not limited to, the following:

A. Small group counseling (2-4) to improve self-understanding and inter-personal relationship.

B. Development and improvement of study procedures.

C. Class attendance listening and note taking.

D. How to take exams.

E. Tutoring sessions.

F. Other as necessary.

4. Individual Follow-Up Conferences

The assistant held follow-up conferences with each counselee, as necessary, with no less than one follow-up conference to be held with each after the 10th week of each semester.

Follow-up sessions included, but were not limited to, the following:

A. Completion of student folder.

B. Completion of individual conference items.

C. Development of perseverance as indicated in 3 and 4 of Activities (theoretical).

D. An evaluation of student progress as indicated in No. 5 of Activities (theoretical).

E. Other as necessary.

5. Referrals

The Research Assistant referred the counselee to:

A. Other student services as needed:

(1) Health Office
(2) Counseling Center
(3) Housing Staff
(4) Student Personnel Deans
(5) Financial Assistance Officer
(6) Placement Officer
(7) Adviser
(8) Other

The Research Assistant referred:

B. Emotional problems to school psychiatrist through Office of Assistant Dean of Students.

6. Staff and Team Inter-Communications

The Research Assistants were free to make contacts with R.A.'s, Head Residents, Asst. Housing Directors, Counseling Advisers, Professors, and others who might have had significant contact with counselees.

7. In-Service Training

The Research Assistants were expected to attend training sessions and conferences as called by the Director or Counselor.

8. Final Report and Evaluation

Each Research Assistant prepared and submitted to the Director a report containing:

A. A descriptive narrative of his personal efforts in carrying out specific activities.

B. The evaluation report on each counselee.

C. An evaluation of the effectiveness of the project in meeting goals.

D. Suggestions for future improvement.

9. Other.

Statistical Procedures

To discover whether two groups differ sufficiently, on the measurement of a particular property, in mean performance to enable us to say with confidence (95%) that there is no difference between the means of the populations from which the samples were drawn, we need to know the Standard Error of the two sample means.

When the N's of the two independent samples are small (less than 30) the Standard Error (SE) of the difference between two means depends upon the Standard Deviations (SD's) computed by the following formula: (Garrett, 1964)

$$SD = \sqrt{\frac{\Sigma x^2}{(N-1)}}$$

The Standard Error of the difference (S. E. D.) then becomes:

$$S.E.D. = \sqrt{\frac{SD_1^2}{N_1} + \frac{SD_2^2}{N_2}} \quad \text{where}$$

SD_1^2 = the Standard Deviation of Sample 1 squared.

SD_2^2 = the Standard Deviation of Sample 2 squared.

N_1 & N_2 = sizes of the two samples.

As a next step in determining whether an experimental group of students actually differs in mean ability, as measured by the SCAT, from the control group we must set up a null hypothesis asserting that the difference between populations of experimental and controls is zero; and that, except for sampling accidents, all obtained mean differences from sample to sample will be zero. The question is whether any obtained mean difference is large enough to refute the null hypothesis of no difference.

To answer this question we must compute a critical ratio (CR) found by dividing the obtained difference in sample means by the Standard Error of the Difference.

$$CR = \frac{D}{S.E.D.}$$

The S. E. D. is actually a Standard Deviation of Variations in sampling means, therefore, 95 per cent of all sampling means will fall within 1.96 S. D.'s of the mean; therefore, a CR of less than 1.96 does not reach the 95 per cent level of confidence and hence the null hypothesis is retained. A CR of 1.96 or greater reaches the 95 per cent level of confidence and hence the null hypothesis must be rejected.

Table IV shows the statistical comparisons between experimental and control groups from the data obtained by the SCAT and DROPS measurements. It will be noted that in each case the CR is <1.96 indicating that for these two measurements there was no difference between control and experimental groups at the 95 per cent level of confidence.

Another of the problems with which we want to deal is whether the percentage of dropouts from the experimental and control groups will differ. By observation at any given time after a new enrollment period begins we can determine the per cent occurrence of dropouts in one or more groups of students. We then want to know whether the incidence of dropout is reliably different in the two groups.

First we set up the null hypothesis that no true difference exists between the percentages of dropouts in the two groups and that, with respect to dropouts, both samples have been drawn from the same population. A useful procedure in testing this null hypothesis is to consider that the two percentages P_1 and P_2 are independent determinations of a common population parameter P which is obtained by:

$$P = \frac{N_1P_1 + N_2P_2}{N_1 + N_2}$$ where N_1 & N_2 are the two sample sizes.

Q then becomes (1-P) and the estimated percentages of P and Q may now be put in a formula to determine the Standard Error of the Difference between P_1 and P_2:

$$\text{S. E. D.} = \sqrt{PQ\left(\frac{1}{N_1} + \frac{1}{N_2}\right)}$$

A Critical Ratio (CR) is then found by dividing the observed difference in percentages (D) by the S. E. D. As with the comparison of means if the CR is <1.96 we must accept the null hypotheses of no difference at the 95 per cent level of confidence.

FINDINGS

The findings from this study may be divided into two major parts, the objective findings obtained by comparing the average grade point and the persistency data between the experimentals and the controls, and the subjective findings taken from the reports of the research assistants.

By the end of the academic year 1968-69, three experimental groups and their controls (1, 2, 3) had completed two semesters of academic work and group 4 had completed one semester. Two sets of data, accumulated grade point averages and percentage of group having dropped from school, were now available for the four groups. The same statistical procedures (discussed earlier under matching procedures) were used to compare each experimental group with its matching control group as were used for the original group matching.

For the data from each pair of groups, a mean score, a difference of means, a Standard Error of the Mean Difference (S.E.D.) and a Critical Ratio (CR) was calculated. (See Table VII).

It will be noted from studying Tables VII and VIII that in each case concerning either grade point average or attendance persistence the experimental group was higher than its control counterpart. Comparison of the same groups for the earlier semester had shown the same direction of movement but of lesser magnitude. If we consider only the direction of improvement then we may apply a one-tailed test requiring only one-half as much comparative difference. Using this test all the experimental groups are in a positive direction of persistency from their respective control groups (above the 95 per cent level of confidence). On the test of grade point average the four starred (*) groups held a condition wherein the experimental group was higher than the control group.

This is a significant situation in that the results of the study showed that in the control groups the subjects with a grade point approaching or within the probationary level had a tendency to drop out leaving only the subjects with higher grade points, while among the experimentals many of the low-grade-point subjects remained in school. Among the experimental groups the research assistants were able to save many of the subjects with low grade points thus lowering the overall grade point averages of the experimental groups. In spite of this, the experimental grade point averages were all above their control counterparts.

TABLE VII

STATISTICAL COMPARISON BETWEEN EXPERIMENTAL AND CONTROL GROUPS GRADE POINT AVERAGES AFTER TWO SEMESTERS AND ONE YEAR

Group	Experimental			Control			Comparison		
	N	Mean	S.D.	N	Mean	S.D.	Mean Diff.	S.E.D.	C.R.
Freudenberger									
Spring 1969	10	2.10	.470	11	1.49	.860	.607	.301	*2.020[1]
Fall 1969	10	2.14	.424	6	1.98	.947	.162	.409	.396
Shannon									
Spring 1969	11	2.43	.689	11	2.17	.768	.260	.364	.714
Fall 1969	10	2.48	.711	8	2.31	.686	.168	.331	.509
Males									
Spring 1969	21	2.27	.605	22	1.83	.872	.444	.228	1.947[2]
Fall 1969	20	2.31	.595	14	2.17	.792	.140	.129	*1.085
Blair									
Spring 1969	20	2.56	.846	20	2.23	.775	.330	.256	*1.287[3]
Fall 1969	16	2.65	.837	12	2.54	.503	.116	.255	.455
Wells									
Spring 1969	18	2.35	.859	16	2.29	.760	.06	.277	.217
Fall 1969	14	2.32	.968	11	2.33	.502	.01	.300	.033
Females									
Spring	38	2.46	.812	36	2.25	.797	.208	.187	*1.112[4]
Fall	30	2.50	.883	23	2.44	.525	.061	.194	.314

* A C.R. greater than 1.96 rejects the null hypothesis of no difference.

1. Rejects the null hypothesis at 93% level of confidence.
2. Rejects the null hypothesis at 93% level of confidence.
3. Rejects the null hypothesis at 76% level of confidence.
4. Rejects the null hypothesis at 70% level of confidence.

TABLE VIII

COMPARISON OF PERSISTENCY BETWEEN
EXPERIMENTAL AND CONTROL GROUPS
AFTER ONE YEAR

Groups	Experimental			Control			Comparison		
	N	Drops	%Dr.	N	Drops	%Dr.	Percent Diff.	SED	CR
Freudenberger	20	10	.50	20	14	.70	.20	.109	*1.83[1]
Shannon	12	2	.167	12	4	.333	.167	.1249	*1.335
Males	32	12	.344	32	18	.563	.219	.009	*23.89[2]
Blair	20	4	.20	20	28	.40	.200	.102	*1.95[3]
Wells	20	6	.30	20	8	.40	.100	.107	*0.937
Females	40	10	.25	40	16	.40	.150	.075	*1.99[4]

1. Rejects the null hypothesis at the 91% level of confidence.
2. Rejects the null hypothesis at the 99% level of confidence.
3. Rejects the null hypothesis at the 93% level of confidence.
4. Rejects the null hypothesis at the 94% level of confidence.

At Blair House, where a research assistant was not found until the end of the fall (1868) semester, the selection and adaptation processes had already set in. Here the experimental and control groups were matched for grade point averages as well as other predictive factors. After only one semester the twenty experimental girls had a grade point average which was .33 of a grade point higher than the control group and significantly different at the 76 per cent level of confidence.

When we consider the difference between the experimental and their respective control groups (regardless of direction) we use the two-tailed test. We must bear in mind that we are searching for procedures and activities which will keep potential dropouts in school. A check of the 1966-67 and 1967-68 school years at S. M. S. had revealed that an average of 52 per cent of beginning freshmen had failed to persist to the beginning of their sophomore years. As nearly as possible all subjects chosen for the study were on the lower end of the scale used for prediction. They were considered least likely to persist. We expected that any effort which would salvage a significant portion of these students would have some merit.

Table IX shows the study groups as compared with the entire freshman class for the 1968-69 school year.

TABLE IX

DROP COMPARISONS BETWEEN STUDY GROUPS AND CLASS

	MALES			FEMALES			TOTAL		
GROUP	N	Drops	%	N	Drops	%	N	Drops	%
Freshman Class	1131	445	39.3	1110	438	39.5	2240	883	39.4
Experimentals	32	12	37.5	40	10	25.0	72	22	20.6
Controls	32	18	56.3	40	16	40.0	72	34	47.2
Total Study Group	64	30	46.9	80	26	32.5	144	56	38.8

Note that for the entire study group of 144 subjects the total who dropped was 56 or 38.8 per cent, very comparable to that of the entire class (39.4 per cent). On the other hand, study males showed a 7.6 per cent higher drop rate than the class while study females showed a 7 per cent lower drop rate than the class. This difference between the sexes was similar for both experimental and control groups.

When looking at the experimental group we find that the males dropped at a rate 12.5 per cent higher than the females (37.5 to 25.0 per cent) while in the controls the males dropped at a rate exceeding the females by 16.3 per cent (56.3 to 40.0). At this time there is no explanation as to why there was a sexual difference in the results of the study groups as compared with the entire class. A possible explanation might be the pressure of the draft upon men to maintain an acceptable scholastic standing in school. A second reason might have involved the personalities of the graduate assistants who worked with the experimental groups.

Small Sample a Limit

It must be recognized that the small numbers in the samples placed severe restrictions on the significance of the statistical comparisons, however, this study was not limited to the objective study of data.

A Change in Attrition Rate

A preliminary investigation started in September, 1966, indicated that for the three-year period between September, 1965, and September, 1968, the average attrition rate for freshmen at SMS had been over 52 per cent. Table IX shows that for the 1968-69 school year this attrition rate dropped to 39.4 per cent. This change in attrition is probably due, at least in part, to a lowering of academic requirements so that a freshman (16-30 hours) need only have a 1.65 accumulated grade point average to be allowed to enroll as a sophomore. Prior to September, 1968, any grade point average below 2.00 would have placed the student on academic probation.

Table X shows a comparison of high school rank between the dropout and persistent groups. It indicates that the persistent group had a mean high school rank of 49.2 percentile for males and 59.4 percentile for females. The dropouts only had mean ranks of 37.1 percentile and 51.2 percentile for males and females respectively. The difference between dropouts and persistent students was 12.1 percentile for males and 8.2 percentile for females.

Subjective Report

The four research assistants, as well as the four housemothers, each submitted a subjective report of the study. The assistant reports contained the following positive points concerning the study:

TABLE X

HIGH SCHOOL RANK OF STUDENTS
COMPARED TO PERSISTENCY AS COLLEGE FRESHMEN

MALES		FEMALES	
	Mean High School Rank		Mean High School Rank
Dropouts	.371	Dropouts	.512
Persists	.492	Persists	.594
Difference	.121	Difference	.082
Total	.444	Total	.562

1. Their presence had generated a great deal of wholesome interest among the residents of the houses.

2. At least 50 per cent of their time was spent in working with self-referred "dropins" who were outside the experimental groups.

3. Most students reported that they felt that someone cared about them as persons and not merely as numbers.

4. The assistants reported getting many requests for the counseling of emotional problems. These were referred to the counselor, a regular member of the college counseling staff.

The assistants agree that in their subjective estimation the experiment worked successfully and that the holding power of the College was enhanced with the students in the four experimental groups. They further agree that there are good indications that a high percentage of the students in the experimental groups are finding college life at SMS a rewarding and successful educational experience.

An informal interview with each of the Head Residents showed that they feel that their respective houses have had an unusually good atmosphere this year, and they attribute this condition to the presence of the Research Assistants.

DISCUSSION

Many colleges today might be termed as typical of a large group where thousands of students hope to receive a higher education. The word "typical," however, does not imply optimum performance; rather it implies adherence to a norm, regardless of whether the performance of the norm be satisfactory or not. Granted the typical college might be regarded as good if it were included in any random sampling of colleges and yet have to admit to a statistic that no institution pledged to educate the populace can be proud, namely, that 50 to 75 per cent of all enrolling freshmen never graduate.

It must be acknowledged by all that this fast-paced world is in dire need of skilled personnel at all levels of tradesmanship and professionalism. We can probably agree that under the present educational system it is a requirement of higher education to provide the lion's share of these personnel. Certainly "standards" must be defined and kept; but shouldn't we question a set of standards that purges away two-thirds of its accepted candidates. Is the college dropout really unsuited to the academic requirements of higher education, or are there not other factors outside the academic pole that must be accounted for and adjusted to?

The entire institution must become actively aware of the dropout problem. No longer may we sit securely in our ivory towers and ignore the demands and needs of students.

Personal generalizations by the study team may necessarily be subjective and biased. Nevertheless, the combined experiences of the team point to four areas in which the tentative dropout may have problems.

1. Personal development (maturity)

   Personal development in a first-term freshman is a continuing process absolutely necessary for college success and satisfaction. When the student enters an environment in which he is no longer being directly controlled by others, he becomes responsible to himself for taking the responsibility for his own personal conduct, the use of his own time, and his personal and social interaction with others. Many students have difficulty adjusting to college because they had not previously had the responsibility for problems which foster personal development. The challenge can only be met by each individual himself; however, the rapid transition from

home life to college must not be allowed to pile up and overwhelm the individual.

The descriptive responses of persistent students seemed to be successful in identifying students with problems of personal development and the presence of the assistant aided in the personal adjustment.

2. The college image

Preconceived ideas of college are generally vague, idealistic, and inflated; and the college freshman needs to adjust rapidly to the first-term realities. This adjustment requires a personal acceptance of the challenge that college offers. Many freshmen expect things from the college that cannot be fulfilled. Others are not aware of a need to adjust to college reality.

Guidance in this area may be of a personal, social, and academic nature and requires personal effort and contact. The assistants in this study felt that they were in an ideal position to identify and administer to those students with this adjustment problem.

3. Academic adjustment

The student with academic problems seems to fall under one or more of several categories, including improper preparation for college demands, an improper concept of the depth and challenge of college material, and an inability to accept the over-inflated demands of some courses. Students with these problems need extra-ordinary personal help and encouragement until they can make a personal adjustment. The team members in this study provided the need fulfillment of many students by giving them an assurance that "somebody cares."

4. Adjustment to student freedom

Student freedom has many virtues but may be used as a vice. The guidance, direction, and personal freedom of the home may have no counterpart in the college environment. The college student may have a sudden freedom from the environmental restraints to which he has become accustomed. Some students cannot immediately adjust to this sudden freedom. The successful student recognizes the void, accepts it as an enjoyable

prospect, and fills it with self-assurance, trial and error, and asking assistance from others. Some students need a form of "weaning" by some trusted person before they can adjust to the new freedom.

First-term freshmen generally have a communication problem making it difficult for them to relate to the college. The college environment seems cold, unconcerned, and impersonal. The poorly adjusted freshman avoids involvement and becomes an individual isolate. Even though the college may provide the concerned, academically minded staff to make the college experience a productive one for many freshmen, this concept of the college may not be strong enough to "get through" to the majority. The outward signs of individual isolation seem to be an insurmountable problem for some freshmen.

It is believed by the members of the study team that this experiment indicates that the individual personal attention given to the experimental groups by the graduate assistants has been instrumental in raising the persistency rate by a significant amount. It may be noted that if the 21.9 per cent improvement for males and the 15 per cent improvement for females could be extended to the entire freshman class, the result might well be that approximately 248 males and 167 females could be saved from attrition each year.

In order to make such an achievement possible, several programmatic changes are recommended:

1. The program should be expanded to include the entire group of potential dropouts including those who commute and live off campus as well as all those who live in campus housing. This might be accomplished by forming off-campus centers run by married couples (one of whom would be a graduate assistant) who would work with the commuting students. The commuting student needs to become involved with and to identify with some part of the academic community.

2. Provide expanded and revised academic advisement for all freshmen. (Many of the experimental students equated their academic difficulties with a lack of or poor advising).

3. Provide a special remedial curriculum for some selected individuals to insure initial academic success. This might be started during the summer term.

4. Expand the training of resident assistants to include functions other than disciplinary.

5. Wherever possible house a potential dropout with a student of potential high success rather than housing two potential failures together.

6. Use the graduate assistant positions to provide special practicum credit and experience for graduate teaching and counseling students.

7. Follow the potential dropout with personalized orientation to graduation or until assured of his personal adjustment.

A SELECTED BIBLIOGRAPHY

(1) Abel, Walter H., "Attrition and the Student who is Certain." Personnel and Guidance Journal. Vol. 44. (June, 1966) p. 1042.

(2) Baker, S. R., "The Relationship between Student Residence and Perception of Environmental Press." Journal of College Student Personnel. Vol. 7. (July, 1966), p. 222-24.

(3) Brunkan, R. J. and F. Shen, "Personality Characteristics of Ineffective, Effective, and Efficient Readers." Personnel and Guidance Journal. Vol. 44. (April, 1966), p. 837.

(4) Campbell, Gene V., "A Review of the Dropout Problem." Peabody Journal of Education. Vol. 44-2 (Sept., 1966), p. 102-109.

(5) Cummer, John P., "Campus Climate and the Educational Process." Journal of College Student Personnel. Vol. 3. (1961), p. 29-32.

(6) Gibbs, D. N., "A Cross Cultural Comparison of Needs and Achievement of University Freshmen." Personnel and Guidance Journal. Vol. 44. (April, 1966), p. 81-3.

(7) Jex, F. B. and R. M. Merrill, "Study in Persistence: Withdrawal and Graduation Rates at University of Utah." Personnel and Guidance Journal. Vol. 40. (1962).

(8) Marks, Edmond, et. al., "Recommended Curricular Change and Persistence in College." Personnel and Guidance Journal. Vol. 44. (May, 1966), p. 974.

(9) Marsh, Lee M., "College Dropouts: A Review." Personnel and Guidance Journal. Vol. 44. (Jan., 1966).

(10) Murray, H. A., Exploration in Personality. New York: Oxford University Press (1938).

(11) Nelson, A. Gordon, "College Characteristics Associated with Freshman Attrition." Personnel and Guidance Journal. Vol. 44. (June, 1966), p. 1046.

(12) Pace, C. R., "Five College Environments." College Board Review. Vol. 61. (1960), p. 24-28.

(13) _____, "Diversity of College Environments." National Association of Women Deans and Counselors' Journal. Vol. 25. (Oct., 1961), p. 21-26.

(14) Standing, G. Robert and Clyde A. Parker, "The College Characteristics Index as a Measure of Entering Students' Preconceptions of College Life." Journal of College Student Personnel. Vol. 6.

(15) Summerskill, John, "Dropouts from College," in Nevit Sanford (ed.) The American College. New York: John Wiley and Sons. (1962). p. 627-659.

(16) Varreger, W. J., "Relationship of Selected Adjustment Factors, College Ability, and Achievement to Dropouts and Non-Dropouts," Journal of Educational Research. Vol. 56. (1963). p. 362.

(17) Garrett, Henry E., Statistics in Psychology and Education, New York: David McKay, Inc., 1964.

APPENDIX A

SOUTHWEST MISSOURI STATE COLLEGE

announces

RESEARCH ASSISTANTS OPENINGS

FOR GRADUATE STUDENTS IN THE FIELD OF

GUIDANCE AND COUNSELING OR RELATED AREAS

1968-1969

THE OFFICE OF STUDENT AFFAIRS HAS OPENINGS FOR SEVERAL GRADUATE STUDENTS, BOTH MALE AND FEMALE. APPLICANTS MUST BE RESIDENT STUDENTS AT THE GRADUATE LEVEL AND MUST BE WORKING ON A MASTERS DEGREE IN GUIDANCE AND COUNSELING, SCHOOL ADMINISTRATION, OR A RELATED AREA, AND ENROLLED FOR A MAXIMUM OF 9 HOURS PER SEMESTER.

THE RECIPIENT WILL BE REQUIRED TO LIVE IN A RESIDENCE HALL AND TO PAY FOR HIS OWN SCHOOL EXPENSES.

RECIPIENTS WILL BE ENGAGED IN A RESEARCH PROJECT DESIGNED TO DEVELOP TECHNIQUES FOR IMPROVING STUDENT SUCCESS IN COLLEGE.

FOR FURTHER INFORMATION WRITE TO:

DR. WILBUR N. STEGMAN, DIRECTOR
ASS'T. DEAN OF STUDENTS
SOUTHWEST MISSOURI STATE COLLEGE
SPRINGFIELD, MISSOURI 65802

OR CALL:

(417) 869-9101, EXT. 258

APPENDIX B

A SERIES OF STUDIES TO DEVELOP REALISTIC ACTIVITIES DESIGNED TO IMPROVE THE RETENTION RATIO OF POTENTIAL STUDENT DROPOUTS

A HANDBOOK FOR RESEARCH ASSISTANTS

The Nature and Extent of the Program

This Program is designed to develop within the college student community activities which will improve the retention ratio of first-year college freshmen.

The activities will include those of both a personal and a small group nature and will touch upon problems in personal, social and/or academic areas. They will be geared to the vital human elements that make up the realities of the daily education scene.

The general objective will be to use whatever practical and feasible measures necessary to insure that a significant number of freshmen, who would otherwise be potential "dropouts," may be kept in college to a satisfying and successful completion of their desired educational objectives. The emphasis will be toward an individualized approach to study and learning.

The Philosophy Supporting the Program

We hope that most students (perhaps 75 to 90 per cent) can find a happy and successful college experience and we believe that it is the task of the college to find the means, the methods and the materials which will enable the largest portion of registering students to attain and complete such an experience. This may well mean taking the competition, the fear and the pain out of getting a "higher education."

We further recognize that a major function of the college is to foster humanistic values and to help create the kind of social, intellectual, and esthetic climate in which the individual contribution to humanity can flourish.

The problem is not to find the few who can succeed but, rather, to determine how the largest possible proportion of a selected age group can choose and learn effectively those skills and subject matter essential to their maximum development in a complex society. The key is to encourage the learner to think and to explore and to take part in designing his own "tailor-made" educational experiences. We believe that the

educational experience must be both successful and rewarding in order that learning may continue throughout one's lifetime as needed.

We agree with John Carroll's (Harvard 1963) view that aptitude is the amount of time required by the learner to attain mastery of a learning task. We assume, therefore, that given enough time, motivation and help that a satisfactory and successful post high school learning experience is within the grasp of all high school graduates. We further assume that because of differences in aptitude, it will necessarily take some students more time, effort, and help to attain this experience than others. For some students the amounts necessary may result in the decision that the cost is prohibitive. In any event, they must be allowed to make their own choices.

We recognize the normal distribution curve to be a representation of a distribution of items most appropriately found in chance or random activities. We hold that education is a controlled, biased, purposeful and goal-directed activity in which we seek to have the educated undergo a definite behavioral change. The student chooses to learn and the educator assists him in the process. If we are effective in our educational purposes, then, our distribution of achievement should be negatively skewed from the normal curve.

Purposes and Goals of the Program

The purpose of this Program is to place Research Assistants in Living Areas, to furnish them with the identity of potential dropouts or academically weak students, to furnish them with pertinent data about those students, and to supervise them in the development of educational activities designed to keep those students successfully in college.

The activities shall be developed with the following criteria in mind:

1. Individual Aptitude

   Activities will be geared to the individual needs and aptitudes so that each person may have the optimum amount of education experience for a given expenditure of time and effort and which he may designate and help to design.

2. Quality of Activities

   Each activity shall be designed and executed under a standard of quality and cooperative effort such that it may, through its presentation and exploration, give the optimum of success for each student in the program.

3. The Development of Ability to Understand and Accept

Every attempt will be made to enhance the ability of the student to explore and understand the nature of the educational experience he is being offered and the procedures he must follow to accept and personalize that experience.

4. Development of Future Planning

College-wide consideration should be given to the following ideas as possibilities for use in future related research:

a. Identify and interview tentative potential non-returning students before admission.

b. Involve students in ongoing planning and development of the program.

c. Maintain ongoing study of dropout follow-up and the development of dropout prediction techniques.

d. Work toward the inclusion of all freshmen potential dropouts.

e. Work for follow-up of "persists" into their sophomore and junior years.

f. Work for experimentation and development of special innovative classes and curriculum changes tailored to the needs of potential dropouts.

g. Update the program to include persons in problem areas such as minority groups.

h. Work for financial aids to support an expanded program.

i. Establish and maintain public relation and information service.

Duties and Responsibilities of Research Assistants

The Research Assistants shall be known as Resident Research Assistants and shall live, as assigned, in a residence hall where they will be available to hold both individual and group guidance and counseling activities with selected students under the supervision of, and/or in cooperation with, a Counselor. They will design and carry out the

spirit of the activities as outlined under "Procedures" and as specifically designed under "Activities" together with such additional ones as may be deemed desirable and necessary throughout the continuance of the program. Such activities will be carried out in cooperation with the supervision of the Assistant Program Director.

The activities will be carried out in the privacy of their own quarters, in the quarters of the counselee, in a common meeting room, or elsewhere, as desired and/or assigned.

They may be expected to assist the Project Director in selected phases of data collection, preparation and reporting.

Time and Stipend

The Research Assistant will receive a stipend of $2400 for two semesters (36 weeks) of duty. The stipend will be paid on the last working day of the month in nine equal monthly payments.

The Research Assistant will be expected to make himself available to the college primarily during the regular school week. Most activities will probably be concentrated in the afternoon and evening hours during school days such that the assistant may generally expect to have Saturdays and Sundays off duty except in cases of a special or emergency nature.

Activities (Theoretical)

1. Tutorial Help

   Every attempt will be made to make this type of help available to students having particular academic difficulties which can't be helped in other ways.

2. The assistant may meet regularly with small groups (two-four) of students to help them to understand and help themselves and to help one another.

   The more able students may be encouraged to strengthen their own concepts and understandings through the process of helping the others to grasp an educative experience through alternative ways of explaining and using that experience.

3. Develop Perseverance for College

   Perseverance is the time and effort the student is willing to spend in the college experience. Students appear to

approach the college experience with varying amounts of perseverance. The student needs to be assured and reassured until he accepts the idea that if his college experience is not successful and rewarding in one way, alternatives are available.

All students must sooner or later give up a task if it is too painful for them. Frequency of reward (praise and recognition) and evidence of success in learning can increase a student's perseverance in the college situation. Each selected student will be encouraged and helped to develop the necessary perseverance to persist in college.

4. Extend the time allowed for a satisfactory college experience. A month or an academic year may be enough for some students to adjust to the college and not enough for others. Students who drop out haven't taken enough time. Each should be encouraged and helped to extend his time so that he may develop a rewarding college experience.

5. Evaluation Sessions

A primary emphasis on competition may destroy the learning and adjustment in any situation. We believe that cooperation and teamwork are essential to individual student success. Reinforcement of proper actions, attitudes and decisions, together with evaluative feedback, must be provided each student so that he may view himself in a positive way.

The Research Assistant may help each student to find the positive view by providing suggestions for improvement and an evaluation of success.

6. Home Visitations

The Research Assistants shall contact parents of students in the experimental groups, where necessary and advisable, in order to maintain a close inter-relationship with the counselee.

7. Social interaction with students living in campus housing shall be fostered to improve the student's ability to relate to college and the student body.

8. The students who participate in an experimental group shall be invited to participate in the planning and development of their individual activities and the group program may eventually include all nonresident freshmen.

Final Report and Evaluation

Each Research Assistant in the program will prepare and submit to the Director a report containing a description of his personal efforts, an evaluation of the effectiveness his efforts have had in meeting the goals of the project and suggestions for future improvement.

Activities - (Specific)

I. Administrative

Each Research Assistant may be expected to contribute to the administration of the project as follows:

A. Sit on a planning committee, together with selected college Faculty and Administrators, to plan for future expansion of the program.

B. Prepare and maintain an individual folder on each counselee which shall contain the following information:

1. Personal data
2. Family data
3. Test scores - DROPS, A.I. & C.C.I. Answer Sheets
4. High school grades
5. Name of adviser
6. Record of financial assistance
7. A schedule of classes
8. Mid-term grades
9. Attendance report
10. Disciplinary reports
11. Notes of individual interviews and all related activities
12. R. A. reports
13. Evaluation
14. Other information as deemed necessary

C. Furnish information for the preparation of a consolidated list of counselees in eight copies for distribution to:

a. Housing Office
b. Dean of Students
c. Dean of Men
d. Dean of Women
e. Assistant Dean of Faculties
f. Counseling Center
g. Other, as necessary

D. Other administrative duties as may be assigned.

II. Individual Conferences (One or more per counselee)

The Research Assistant should concentrate on this type of activity during the first month and after the 10th week (follow-up) of each semester.

The individual conference should contain the following:

1. The establishment of rapport and a satisfactory working relationship between counselor and counselee.

2. An identification of counselee interests.

3. A review of the academic potential of the student.

4. Discussion of classes scheduled with the counselee's reaction to those he is attending.

5. Work out a scheduling of counselee's time to include: class, study, co-curricular, recreational, free, other.

6. Attempt to verify and crystallize attitudes shown on DROPS, A.I., and C.C.I. Questionnaires.

7. Evaluate counselee for group activities.

8. Schedule for tutorial help as deemed necessary - find tutor.

9. Complete interview checklist.

10. Other as deemed necessary.

III. Group Activities

The assistant should concentrate on group activities during the 2nd and 3rd month of each semester. Participants should be selected and invited during the individual conferences. Group activities shall include the following:

1. Small group counseling (2-4) to improve self-understanding and inter-personal relationship.
2. Development and improvement of study procedures.
3. Class attendance, listening and note-taking.
4. How to take exams.
5. Tutoring sessions.
6. Other as necessary.

IV. Individual Follow-Up Conferences

The assistant shall hold follow-up conferences with each counselee, as necessary, with no less than one follow-up conference to be held with each after the 10th week of each semester.

Follow-up sessions should include the following:

1. Completion of student folder.
2. Completion of individual conference items.
3. Development of perseverance as indicated in 3 and 4 of Activities (theoretical).
4. An evaluation of student progress as indicated in No. 5 of Activities (theoretical).
5. Other as necessary.

V. Referrals

The Research Assistant shall refer the counselee to:

A. Other student services as needed:

1. Health Office
2. Counseling Center
3. Housing Staff
4. Student Personnel Deans

5. Financial Assistance Officer
6. Placement Office
7. Adviser
8. Other

The Research Assistant shall refer:

B. Emotional problems to school psychiatrist through office of Assistant Dean of Students.

VI. Staff and Team Inter-Communications

The Research Assistant shall be free to make contacts with the Counseling Assistant, the Counselees, Advisers, Professors, and others who may have significant contact with counselees.

VII. In-Service Training

The Research Assistant may be expected to attend training sessions and conferences as called by the Director or Assistant Director.

VIII. Final Report and Evaluation

Each Research Assistant will prepare and submit to the Director a report containing:

1. A descriptive narrative of his personal efforts in carrying out specific activities.

2. The evaluation report on each counselee.

3. An evaluation of the effectiveness of the project in meeting goals.

4. Suggestions for future improvement.

IX. Other.